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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/525,791	02/25/2005	Akira Hommi	12699/14	3044

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KENYON & KENYON LLP
1500 K STREET N.W.
SUITE 700
WASHINGTON, DC 20005

EXAMINER

SMITH, TYRONE W

ART UNIT PAPER NUMBER

2837

DATE MAILED: 12/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/525,791

Applicant(s)

HOMMI ET AL.

Examiner

Tyrone W. Smith

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2837

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>6/14/06</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

The indicated allowability of claims 1-18 is withdrawn in view of the newly discovered reference(s) to Nada (EP1147937A2). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-18 rejected under 35 U.S.C. 103(a) as being unpatentable over Tabata et al (JP10-304514) in view of Nada (EP1147937A2).

Regarding Claims 1, 11, and 12. Tabata discloses drive force controlling device for hybrid vehicle, which includes an angular acceleration measurement module that measures an angular acceleration of either of the drive shaft and a rotating shaft of the motor (Figure 2 item M) (section 0008 - section (0011)), a first skid detection module that detects a skid due to wheel spin of the drive wheels, based on the measured angular acceleration (section (0008) - section (0011))., a first torque restriction control module that, in response to detection of a skid by the first skid detection module restricts torque output and controls said motor with the restricted torque output, so as to reduce the skid (section (0008) - section (0011))., a first integration module that integrates the angular acceleration, which is measured by the angular acceleration measurement module to give a time integration thereof since detection of the skid by the first

skid detection module (section (00081 - section (0011))). Refer to the abstract and sections (0082) - (0094).

However, Tabata does not disclose a torque restriction cancellation control module or having similar operation that, in response to at least a reducing tendency of the skid, cancels the torque restriction, which is set by said torque restriction control module and controls the motor under at least partly cancelled torque restriction.

Nada discloses a vehicle slip control system which includes a torque restriction cancellation control module that, in response to at least a reducing tendency of the skid, cancels the torque restriction, which is set by said torque restriction control module, to a specific degree corresponding to a variation in driver's accelerator operation, and controls said motor under at least partly cancelled torque restriction. Refer to the abstract, sections [0039]-[0043] and [0094]-[0095].

It would have been obvious to one of ordinary skill in the art at the time of invention to use Tabata's drive force controlling device for hybrid vehicles with Nada's vehicle slip control system. The advantage of combining the two would provide a system to prevent slippage at the time of accelerating by greatly reducing an engine output on detecting the slippage of the driving wheels.

Regarding Claims 2 and 13. Tabata discloses drive force controlling device for hybrid vehicle, which includes an angular acceleration measurement module that measures an angular acceleration of either of the drive shaft and a rotating shaft of the motor (Figure 2 item M) (section (0008) - section (0011)). A first skid detection module that detects a skid due to wheel spin of the drive wheels, based on the measured angular acceleration (section (0008) – section (0011)).

Regarding Claims 3 and 14 Nada discloses a first torque restoration control module/torque resetting means that, in response to at least a reducing tendency of the skid, restores the torque in a stepwise manner, output and controls the motor with the restored torque output. Refer to the abstract, sections [0039]-[0043] and [0094]-[0095].

Regarding Claims 4, 5 and 15-18. Nada discloses a first torque restoration control module/torque resetting means that, in response to at least a reducing tendency of the skid, restores the torque output and controls the motor with the restored torque output. Further, restores output torque level at a predetermined timing when the angular acceleration measured by said angular acceleration measurement module has an increase or decrease (by the driver's operation) in the course of convergence of the skid. Refer to the abstract, sections [0039]-[0043] and [0094]-[0095].

Regarding Claims 6 and 7. Tabata discloses drive force controlling device for hybrid vehicle, which includes an angular acceleration measurement module that measures an angular acceleration of either of the drive shaft and a rotating shaft of the motor (Figure 2 item M) (section (0008) - section (0011J); a first skid detection module that detects a skid due to wheel spin of the drive wheels, based on the measured angular acceleration (section (0008) – section (0011), a first torque restriction control module that, in response to detection of a skid by the first skid detection module restricts torque output and controls said motor with the restricted torque output, so as to reduce the skid (section (0008) - section (0011J); a first integration module that integrates the angular acceleration, which is measured by the angular acceleration measurement module to give a time integration thereof since detection of the skid by the first skid detection module (section (0008) - section (0011)). Refer to the abstract and sections (0082) - (00941).

Regarding Claim 8-10. Tabata and Nada do not indicate another torque restriction control module or re-restriction torque module being used in the invention.

In re Harza, 274 F.2d 669, 124 USPQ 378 (CCPA 1960) (Claims at issue were directed to a water-tight masonry structure wherein a water seal of flexible material fills the joints which form between adjacent pours of concrete. The claimed Water seal has a "web" which lies ** in the joint, and a plurality of "ribs" ** >projecting outwardly from each side of the web into one of the adjacent concrete slabs. <The prior art disclosed a flexible water stop for preventing passage of water between masses of concrete in the shape of a plus sign (+). Although the reference did not disclose a plurality of ribs, the courts held that mere duplication of pads has no patentable significance unless a new and unexpected result is produced.).

Response to Amendment

3. The indicated allowability of claims 1-18 is withdrawn in view of the newly discovered reference(s) to Nada (EP1147937A2).

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tyrone W. Smith whose telephone number is 571-272-2075. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan, can be reached on 571-272-2800 ext. 37. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

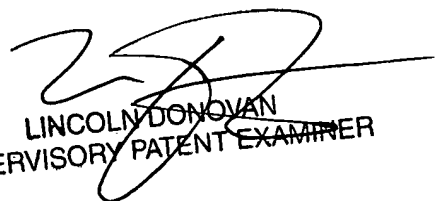
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Tyrone Smith
Patent Examiner

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LINCOLN DONOVAN
SUPERVISORY PATENT EXAMINER